

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Currently Amended): A modular system comprising an electrical base unit with a plurality of slots each for receiving a pluggable electrical unit, each pluggable electrical unit being electrically connected to the base unit by means of a multi-pin plug-in connection comprising a plug-in contact device and a mating plug-in contact device and the base unit being provided with signal processing means, characterized wherein for each multi-pin plug-in connection:

~~in that the~~ plug-in contacts of the multi-pin plug-in connection (13, 23) are divided into at least two groups (31, 32),

~~in that a first group (31) of plug-in contacts is intended~~ provides for the connection of a permanently configured lines line (41) for the identification of the pluggable electrical unit (2) and

~~in that a second group (32) of plug-in contacts is intended~~ provides for the connection of a freely configurable lines line (42) for the communication of the pluggable electrical unit (2) with the base unit (1), the direction of signal transmission and the logical signal assignment of ~~these lines~~ the freely configurable line being ~~predeterminable slot specifically~~ determined in accordance with the identity of the pluggable electrical unit (2) ~~and able to be set as prescribed~~ by the signal processing means (12).

Claim 2 (Currently Amended): ~~System~~ The system according to Claim 1, ~~characterized in that~~ wherein for each multi-pin plug-in connection, a third group (33) of plug-in contacts is ~~intended~~ for the connection of a permanently configured lines line (43) for the communication of the pluggable electrical unit (2) with the base unit (1).

Claim 3 (Currently Amended): The system of Claim 4 2 wherein for each multi-pin plug-in connection, said pluggable electrical unit has a microcontroller, which is connected to the second and third groups of plug-in contacts.

Claim 4 (Currently Amended): ~~System~~ The system according to Claim 1, ~~characterized in that~~ wherein for each multi-pin plug-in connection, the pluggable electrical unit (2) has a serial read-only memory (21), which is connected to the permanently configured ~~lines~~ line (41) of the first group (31) of plug-in contacts and which has identifiers for the identification of the pluggable electrical unit (2).

Claim 5 (Currently Amended): ~~System~~ The system according to Claim 4, ~~characterized in that~~ wherein individual configuration data of the pluggable electrical unit (2) are stored in the serial read-only memory (21).

Claim 6 (Canceled)

Claim 7 (New): A modular system comprising:
a plurality of pluggable electrical units, each having an identification and a contact device;

an electrical base unit comprising:

a signal processing means;

a plurality of base contact devices for pluggable connection to the contact devices of the pluggable electrical units, respectively, each of said base contact devices being connected to the signal processing means and comprising a first group of contacts and a second group of contacts; and

wherein for each base contact device, the identification of the pluggable electrical unit connected to the contact device is conveyed to the signal processing means through the first group of contacts;

wherein for each base contact device, communication between the pluggable electrical unit connected to the base contact device and the signal processing means is conveyed through the second group of contacts; and

wherein for each base contact device, the direction of signal transmission and the logical signal assignment for each contact of the first group of contacts are fixed and the direction of signal transmission and the logical signal assignment for each contact of the second group of contacts is configured by the signal processing means based on the identity of the pluggable electrical unit connected to the base contact device.

Claim 8 (New): The system of claim 7, wherein each of the base contact devices of the base unit further comprises a third group of contacts and wherein for each base contact device, the direction of signal transmission and the logical signal assignment of each contact of the third group of contacts is fixed.

Claim 9 (New): The system of claim 8, wherein in each of the pluggable

electrical units, the contact device comprises first, second and third groups of contacts for respective connection to the first, second and third groups of contacts of the base contact device that is connected to the contact device.

Claim 10 (New): The system of claim 9, wherein each of the pluggable electrical units further comprises:

a serial read-only memory connected to the first group of contacts of the contact device, said serial read-only memory storing the identification of the pluggable electrical unit; and

a microcontroller having input/output terminals connected to the second and third groups of contacts of the contact device.

Claim 11 (New): The system of claim 10, wherein in each of the pluggable electrical units, the direction of signal transmission and the logical signal assignment for each contact of the second group of contacts are fixed and are based on the identity of the pluggable electrical unit.

Claim 12 (New): The system of claim 10, wherein in each of the pluggable electrical units, the first group of contacts consists of two contacts.

Claim 13 (New): The system of claim 8, wherein the third groups of contacts of the base unit are connected together and the directions of signal transmission and the logical signal assignments for the third group of contacts are identical for each of the base contact devices.

Claim 14 (New): The system of claim 7, wherein the base unit has a plurality of slots for receiving the pluggable electrical units, respectively, said slots being provided with the base contact devices, respectively.